WHAT IS CLAIMED IS:

1. An optical pickup comprising:

a first laser beam source generating a first laser beam;

a second laser beam source generated a second laser beam having a different wavelength than the first laser beam;

an optical system projecting the first and second laser beams to a signal layer of an optical disk and transmitting the first and second laser beams as reflected from the signal layer;

an optical detector detecting the first and second laser beams transmitted from the optical system, the optical detector being optimized with respect to the second laser beam; and

an optical converter converting the first laser beam transmitted from the optical system into the laser beam detectable by the optical detector.

2. The optical pickup as claimed in claim 1, wherein the first and second laser beam sources comprise laser diodes.

3. The optical pickup as claimed in claim 1, wherein the optical system comprises:

a first collimating lens diverging the first laser beam at a predetermined angle that permits a fracture surface aberration of the first laser beam to fall below a predetermined value when the first laser beam generated from the first laser beam source is collected on the signal layer of the optical disk;

a second collimating lens converting the second laser beam generated from the second laser beam source into a parallel ray;

a prism reflecting the laser beams transmitted through the first and second collimating lenses toward the optical disk, while transmitting the laser beams reflected from the signal layer of the optical disk;

an objective lens collecting the laser beams reflected from the prism onto the signal layer of the optical disk; and

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a light receiving lens collecting the laser beam reflected from the signal layer of the optical disk on the optical detector in the form of an optical spot of a predetermined size.

4. The optical pickup as claimed in claim 3, wherein the first laser beam has a wavelength of 640-660nm or 770-800nm and the second laser beam has a wavelength of 400-420nm.

5. The optical pickup as claimed in claim 4, wherein the predetermined value is less than or equal to 0.008λ where the λ is the wavelength and the predetermined angle ranges from $0.4°$ to $0.6°$.

6. The optical pickup as claimed in claim 1, wherein the optical detector comprises a photo diode.

7. The optical pickup as claimed in claim 1, wherein the optical converter includes a holographic lens having a pattern by which the second laser beam is directly transmitted without conversion, while the first laser beam is converted into parallel rays.

8. The optical pickup as claimed in claim 7, wherein the pattern has a concentric annular concave-convex portion in which a plurality of annular prominences and depressions are arranged.

9. The optical pickup as claimed in claim 8, wherein the depression and the prominence have a width that gradually decreases from the center of the optical converter toward the most outer circumference of the concentric annular concave-convex portion.

10. The optical pickup as claimed in claim 8, wherein an inner surface of each prominence has a step-like shape formed with at least one step.

11. The optical pickup as claimed in claim 10, wherein the number of the step ranges from

three to five.

12. An optical pickup comprising:

a first laser diode generating a first laser beam;

a second laser diode generating a second laser beam having a different wavelength than the first laser beam;

a first collimating lens diverging the first laser beam at a predetermined angle;

a second collimating lens converting the second laser beam into parallel rays;

a prism reflecting the laser beams transmitted through the first and second collimating lenses toward an optical disk, and transmitting reflected laser beams from a signal layer of the optical disk;

an objective lens collecting the reflected laser beams from the prism on the signal layer of the optical disk;

a light receiving lens collecting the reflected laser beams from the signal layer of the optical disk in the form of optical spot of a predetermined size;

a photo diode detecting the optical spot collected by the light receiving lens; and

a holographic lens converting the first laser beam into parallel rays so as to form the optical spot, of the first and second laser beams having identical sizes.

13. An optical disk drive comprising:

an optical pickup projecting a laser beam to an optical disk and detecting a signal from the reflected laser beam, said optical pickup comprising:

first and second laser beam sources generating a first and second laser beams respectively, the first and second laser beams having different wavelengths;

an optical system projecting the first and second laser beams onto a signal layer of the optical disk;

detecting means for detecting the first and second laser beams as reflected from the signal layer of the optical disk; and

optical converting means for converting the first and second laser beams as

reflected from the signal layer of the optical disk so that the converted first and second laser beams are detectable by the optical detecting means; and

a driving section moving the optical pickup to a desired portion of the optical disk;

a signal processing section processing the signal detected by the optical pickup and converting the signal into information; and

a controlling section for controlling the optical pickup, the driving section, the signal processing section.

14. The optical disk drive as claimed in claim 13, wherein the first and second laser beam sources comprise laser diodes.

15. The optical disk drive as claimed in claim 13, wherein the optical system comprises:

a first collimating lens diverging the first laser beam at a predetermined angle;

a second collimating lens converting the second laser beam into parallel rays;

a prism reflecting laser beams transmitted through the first and second collimating lenses toward the optical disk, and transmitting the first and second laser beams as reflected from the signal layer of the optical disk;

an objective lens for collecting laser beams reflected from the prism on the signal layer of the optical disk; and

a light receiving lens for collecting laser beams reflected from the signal layer of the optical disk on the detecting means in the form of optical spot of a predetermined size.

16. The optical disk drive as claimed in claim 13, wherein the detecting means comprises a photo diode.

17. The optical disk drive as claimed in claim 13, wherein the optical converting means comprises a holographic lens having a pattern in which the first laser beam is converted into parallel rays so as to cause the size of the optical spots generated by the first and second laser beams to be identical.

18. A method of reading data from a plurality of types of optical disks, the method comprising:

loading a first disk of a first type;

projecting a first laser of a first wavelength selected based on the requirements of the first type;

reflecting the first laser onto the first disk;

transmitting the first laser, as reflected from the first disk onto a detection unit in the form of a first spot;

loading a second disk of a second type;

projecting a second laser of a second wavelength, different than the first wavelength, based on the requirements of the second type;

reflecting the second laser onto the second disk; and

transmitting the second laser, as reflected from the second disk through a holographic lens, converting the second laser into parallel rays, and onto a detection unit in the form of a second spot having a size similar to a size of the first spot such that the detector can detect both the first and second spots.

19. A method as set forth in claim 18, wherein the first wavelength is from 400nm to 420nm and the second wavelength is from 640nm to 660nm.

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